

## U.S. Department of Energy

### STATE PLAN/MASTER FILE WORKSHEET

Grant Number: EE0006193 State: WI Program Year: 2015

#### V. Master File

##### V.1 Eligibility

###### General Description

Owners and renters with income levels up to 60% of the State Median Income may receive services. Priority is given to households with children under 6, elderly or disabled members, and households with a high energy burden.

###### V.1.1 Approach to Determining Client Eligibility:

Wisconsin adopted for its Weatherization Assistance Program (WAP) eligibility the same guidelines used statewide in the Low Income Home Energy Assistance Program (LIHEAP). A household is eligible for weatherization services when the Wisconsin Department of Administration, Division of Energy Services (DES or 'the Division') has certified the household to be eligible for LIHEAP, based on the following criteria from 10 CFR Part 440.22:

(a) A dwelling unit shall be eligible for weatherization assistance under this part if it is occupied by a family unit:

(1) With an income at or below 200 percent of the poverty level determined in accordance with criteria established by the Director of the Office of Management and Budget.

(2) Which contains a member who has received cash assistance payments under Title IV or XVI of the Social Security Act or applicable State or local law at any time during the 12-month period preceding the determination of eligibility for weatherization assistance; or

(3) If the State elects, is eligible for assistance under the Low-Income Home Energy Assistance Act of 1981, provided that such basis is at least 200 percent of the poverty level determined in accordance with criteria established by the Director of the Office of Management and Budget.

###### Income Verification

Wisconsin has a combined LIHEAP and WAP application intake process that provides all of the applications for weatherization subgrantees. The Wisconsin Home Energy Assistance Program (WHEAP) income limit equaling 60% of State Median Income (SMI) is used to provide consistency of service and allow shared systems and programming for data collection, entry, and reporting. If a household is over 60% State Median Income (SMI) and ineligible for Energy Assistance but below 200% Federal Poverty Level (FPL), then they are eligible for Weatherization Services and referred to subgrantee. Since 60% SMI is very close to 200% FPL in WI, this applies to a very small number of households.

The Division has established written policies, incorporated in the Weatherization Program Manual, which set forth procedures to determine dwelling unit priority [440.16]. Written policies cover income eligibility, determination of rental property eligibility, and assurance of tenant benefit from weatherization services. An energy audit must be completed within 12 months from the certification date or the eligibility of the household needs to be re-established by re-applying for WHEAP. Wisconsin complies with all household and building eligibility criteria outlined in 10 CFR 440.22.

###### Qualified Aliens Eligibility for Benefits

Non-citizen applicants to the LIHEAP program in Wisconsin are determined to be either eligible non-citizens or ineligible non-citizens. Eligibility for non-citizens is determined based on an individual's lawful status in the United States as defined by the United States Citizenship and Immigration Services (USCIS). Only Eligible Non-citizens are eligible for LIHEAP and the Wisconsin Weatherization Assistance Program.

In order to be defined an Eligible Non-citizen, an individual must have a valid Social Security Number (SSN) issued by the Social Security Administration, which passes the verification system in the Home Energy Plus (HE+) System. The

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HE+ System verifies the SSN of all household members through the Social Security Administration using the Master Customer Index database administered by the State of Wisconsin Department of Health Services. In addition to a valid SSN, the individual's lawful status must be one of the eligible statuses listed in the WHEAP Operations Manual, Section 2.2.4. Applicants are required to provide non-expired documentation which validates their lawful status in the United States.

Individuals who do not have a valid SSN and/or immigration status are marked as Ineligible Non-citizens and are not eligible for either program.

#### V.1.2 Approach to Determining Building Eligibility

The Division has established written policies, incorporated in the Weatherization Program Manual, which set forth procedures such as verifying ownership, denying or deferring services, and using Weatherization Assistant, to determine building eligibility.

##### **Procedures to determine that units weatherized have eligibility documentation:**

The combined LIHEAP and WAP application intake process provides all of the applications for weatherization subgrantees. The Wisconsin Home Energy Assistance Program (WHEAP) income limit equaling 60% of state median income will be used to provide consistency of service and allow shared systems and programming for data collection, entry, and reporting.

#### **Reweatherization**

Wisconsin permits the reweatherization of units completed through September 30, 1994. Units previously weatherized may receive any additional measures as determined by an assessment utilizing DOE approved energy audit protocol. By following this procedure, Wisconsin is identifying units that did not receive the full complement of weatherization services previously. Otherwise, a unit may only be reweatherized if such dwelling unit has been damaged by fire, flood, or an act of God and repair of the damage to weatherization materials is not paid for by insurance, per 440(18)(2)(ii).

#### **Eligible Structures**

To be considered for weatherization, a dwelling must be a structure, including a stationary mobile home, apartment, group of rooms, or a single room occupied as separate living quarters (including historic properties), and qualified shelters or other group facilities. Government institutions, halfway houses, nursing homes, recreational vehicles (RVs), cars, trucks or tents are not eligible dwellings for weatherization services. Properties having only a commercial use are not eligible for weatherization. Properties fifty years old or older must be reviewed for possible historic status or features and shall be weatherized only in such a way as complies with the State Historic Preservation Officer (SHPO) Programmatic Agreement. Weatherization of a dwelling unit which is designated for acquisition or clearance by a Federal, State, or local program within 12 months from the completion date of weatherization is not allowed.

#### **Rental Units**

Wisconsin has an extensive policy regarding the weatherization of rental property, including procedures to document that the tenant receives the benefits of weatherization [440.22(b)]. Rental property owners may be required to contribute to the cost of weatherization [440.22(d)].

Language from the Wisconsin Weatherization Program Manual addresses the DOE requirements regarding limits on rent increases and undue enhancement. Renters are notified of the stipulations on rent increases. Compliance is monitored at on-site administrative review visits to subgrantees. Rental property owners must provide signature approval of work to be performed on a standardized Rental Work Agreement prior to commencement of work. Renters are provided a copy of the work agreement. The Division has established an arbitration procedure for disputes relating to violations of rental agreements. Tenants and property owners are notified of this process at the time of weatherization. As part of the rental agreement, landlords must agree to repayment of weatherization service for violation of the agreement [440.22(c)].

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When DOE funds are used to weatherize multi-unit buildings, Wisconsin requires that 66 percent or more (50 percent for 2 and 4 unit buildings) of the dwelling units in the building are occupied by eligible applicants. Multi-family buildings that have 25 or more units are considered on a case-by-case basis and completion is managed by the local subgrantee with extensive oversight by the Division to ensure work completed meets all applicable federal requirements.

#### Deferral

Wisconsin has a detailed policy and clear procedures for subgrantees to follow when deferral is necessary (Wisconsin Weatherization Program Manual 2.5). Subgrantees are required to provide notification of deferral within five working days upon decision to defer services, and provide a reasonable timeframe for applicants to address the cause of the deferral. Reasons for deferral include structural or other issues that would limit the effectiveness or reduce the lifetime of measures (such as in a home needing roof replacement). There are also health and safety reasons that may warrant deferral of a unit. Additional information on deferrals is found in section V.7 Health and Safety, under part D.

**V.1.3 Definition of children:** Below age 6.

#### V.1.4 Approach to Tribal Organizations

**Recommend tribal organization(s) be treated as local applicant?:** Yes.

**If YES, Recommendation: If NO, statement that assistance to low-income tribe members and other low-income persons is equal:**

The Division provides weatherization services to eligible Native American households both on and off reservations [440.16(f)]. The State will apportion funds to the tribes for outreach. Tribal referrals are required to be given priority for service by weatherization subgrantees. Off-reservation households of Native Americans will be served by local agencies in that service area according to the same prioritization system as non-Native households.

#### V.2 Selection of Areas to Be Served

Weatherization services are provided on a statewide basis. The Division contracts with Community Action Agencies and a variety of other public and nonprofit entities to deliver weatherization services [440.15(a) (1)]. Public comment is solicited on the selection of subgrantees as part of the public hearing on the draft application for DOE funds [440.15(a)(2)]. In selecting subgrantees, preference is given to any agency with experience and performance in weatherization or housing renovation, in assisting low income persons in the area, and currently administering a timely and effective weatherization program [440.15(a)(2)(i,ii,iii)]. This is done to maintain stability so that clients can readily identify where they may receive needed services.

Selection of new or additional subgrantees will be made in accordance with the requirements of 440.15(d) and include consideration of:

- a. The extent to which the weatherization goals set forth in the contract are achieved in a timely fashion;
- b. The quality of work performed;
- c. The number, qualifications, and experience of the staff;
- d. The ability to secure volunteers, training participants, public service employment workers, and other federal or state training programs or resources.

If the Division finds that a subgrantee has failed to comply substantially and should be replaced, notice is given to the subgrantee of the failure and the action intended by the Division [440.15(c)].

Funding allocations among the subgrantees [440.15(b)] are made according to a population-weighted degree-day formula, shown below, which complies with the requirement to allocate on the basis of relative need. The formula is used to

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determine overall agency funding except for Training and Technical Assistance (T&TA). Any additional DOE funds received during the year will be allocated to local agencies according to the same formula.

The allocation formula is:

$$\text{CDD} \times \text{CPH} \times 100 = \text{County allocation} \\ \text{SCDDH percentage}$$

where:

CDD is the average county degree-days

CPH is the county persons eligible for Low Income Home Energy Assistance (LIHEAP)

SCDDH is the sum of the county degree days multiplied by LIHEAP eligible households

### V.3 Priorities for Service Delivery

The State of Wisconsin requires subgrantees to prioritize weatherization services to the elderly, disabled persons, households with children under six years old, and households with a high energy burden [440.16(b)]. Eligible households are assigned a priority identification number and added to a referral list maintained by the Division. The priority identification number is generated based on factors including the household energy burden, and whether the household includes members that are elderly, disabled, or under six years old. The referral list is updated weekly and available to subgrantees electronically. Subgrantees select referrals from the list based on priority identification number and actual energy use data (when available).

### V.4 Climatic Conditions

Extreme temperatures characterize Wisconsin's winter climate, with extended cold seasons in both autumn and spring [440.14(b)(2)]. Wisconsin's location near the center of the North American continent gives the state a typical continental climate with a large annual range in temperature. Wisconsin has major seasonal temperature changes and a significant north-south temperature gradient. The prevailing northwesterly wind pattern and complete lack of a mountain barrier toward the Arctic leave the state open to Arctic air masses. The coldest month, January, has average temperatures from 9 degrees in the northwest to 18 degrees in the southeast. These features indicate a strong need for weatherization. (Information from State Climatologist)

For the purpose of reducing the cost of home heating, one mechanism for assessing climatic conditions is the use of degree days [440.14(b)(2)]. Degree days are the difference between the outside temperature and a constant 65-degree indoor temperature. In Wisconsin, the normal heating degree days range from a low of 6,894 to a high of 9,033.

### Wisconsin Normal Heating Degree Days

#### Thirty Year Average by County, 1981 – 2010

County	Degree Days	County	Degree Days	County	Degree Days
Adams	7,917	Iowa	7,574	Polk	8,628
Ashland	8,828	Iron	8,828	Portage	7,917
Barron	8,628	Jackson	7,959	Price	8,828
Bayfield	9,033	Jefferson	7,333	Racine	6,894
Brown	7,955	Juneau	7,917	Richland	7,574
Buffalo	7,959	Kenosha	6,894	Rock	7,333
Burnett	8,628	Kewaunee	7,955	Rusk	8,628
Calumet	7,955	LaCrosse	7,959	Sauk	7,574
Chippewa	8,628	Lafayette	7,574	Sawyer	8,628
Clark	8,106	Langlade	8,391.50	Shawano	8,391.50

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Columbia	7,333	Lincoln	8,106	Sheboygan	7,955
Crawford	7,574	Manitowoc	7,955	St. Croix	7,959
Dane	7,333	Marathon	8,106	Taylor	8,106
Dodge	7,333	Marinette	8,391.50	Trempealeau	7,959
Door	7,955	Marquette	7,917	Vernon	7,574
Douglas	9,033	Menominee	8,391.50	Vilas	8,828
Dunn	7,959	Milwaukee	6,894	Walworth	6,894
Eau Claire	7,959	Monroe	7,959	Washburn	8,628
Florence	8,391.50	Oconto	8,391.50	Washington	6,894
Fond du Lac	7,955	Oneida	8,828	Waukesha	6,894
Forest	8,391.50	Outagamie	7,955	Waupaca	7,917
Grant	7,574	Ozaukee	6,894	Waushara	7,917
Green	7,333	Pepin	7,959	Winnebago	7,955
Green Lake	7,917	Pierce	7,959	Wood	7,917

#### V.5 Type of Weatherization Work to Be Done

##### V.5.1 Technical Guides and Materials

Subgrantees shall, in a satisfactory manner, perform program activities according to the "Weatherization Assistance for Low Income Persons Program" regulations pursuant to Part A, U.S.C. 6861-6872 of Title IV of the Energy Conservation and Production Act, Pub. L94-385, 90 Stat. Et. Seq: Title 10, Chapter 2, Part 440 (published in the Federal Register), Friday, December 8, 2000, Vol. 65 No. 237.

Wisconsin uses the Wisconsin Weatherization Program Manual (revised April 2015) and the Wisconsin Weatherization Field Guide (revised and submitted to DOE Project Officer April 1, 2015; to be implemented with the new contract cycle beginning July 1) to pass along to its subgrantees policies and procedures to be followed. These and more guidance documents are located on the Division's Home Energy Plus website at <http://homeenergyplus.wi.gov/category.asp?linkcatid=494&linkid=122&locid=25>. The Division also issues periodic policy updates and other guidance through emails to subgrantees.

A balanced combination of energy conservation techniques will be utilized in compliance with DOE regulations [440.14(c)(3)]. Since July 1, 2012 major measures are selected by a computerized energy audit which has been approved by the Department of Energy. Typical work includes instrumented air sealing, insulation of the attic, sidewalls and other areas that define the heating envelope, refrigerator replacement, electric water heater conversion, mechanical adjustments such as heating system cleaning and tune-up, furnace replacements when necessary, and lighting replacement with Energy Star® qualified compact fluorescent light bulbs (CFLs). Wisconsin will supplement these measures with leveraged funds to provide freezer replacement and expanded health and safety measures that are necessary to maintain the Indoor Air Quality of weatherized homes. Allowable expenditures are established to meet the requirements of 10 CFR Part 440.18. All work is performed according to DOE approved energy audit procedures. All materials and specifications are met per the standards set forth in 10 CFR 440, Appendix A.

#### WPN 15-4, Section 1: Definition of Work Quality Guidelines and Standards

All measures and incidental repairs performed on client homes must meet the specifications provided in the Weatherization Program Manual and Weatherization Field Guide. The current versions of these guidance documents are available on the Home Energy Plus website: <http://homeenergyplus.wi.gov/category.asp?linkcatid=494&linkid=122&locid=25>. Electronic copies of the draft PY 2015 Program Manual, Field Guide and related technical documents are attached to the application.

During PY 2014 Wisconsin reviewed and revised the Weatherization Field Guide to ensure all standards meet or exceed the minimum standards in the relevant SWS requirements as required by WPN 15-4 Section 1. The Division submitted a

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variance request to our DOE Project Officer March 12, 2015. Draft program documents were submitted to our DOE Project Officer April 1, 2015, and included references to the appropriate SWS for each procedure. The updated Weatherization Program Manual and Weatherization Field Guide will be distributed electronically to all subgrantees via broadcast e-mail and available on the Home Energy Plus website on or before July 1, 2015. Wisconsin Request for Bid templates include a requirement that subgrantees ensure contractor agreements are tied to program requirements contained in technical guides and materials.

#### WPN 15-4 Section 2: Communication of Guidelines and Standards

All subgrantee agreements and contracts contain language which requires that work performed meets the technical specifications for field work provided in the Weatherization Program Manual and Weatherization Field Guide. The Grantee contract requires subgrantees install allowable weatherization measures per the Wisconsin Weatherization Program Manual, and federal and state regulations (Article 5. Scope of Work). All work is being performed in accordance with DOE-approved audit procedures (see V.5.2 below) and 10 CFR 440 Appendix A (see Wisconsin Weatherization Program Manual Chapter 11 – Weatherization Materials and Specifications).

In April 2014, Wisconsin updated the Weatherization Program Manual to clarify that subgrantees are required to identify and provide the applicable technical standards and specifications in every procurement action. In addition, in April 2014 Wisconsin updated the Request for Bid templates used by subgrantees to ensure that contract agreements are tied to our program requirements and the related Standard Work Specifications incorporated into our program documents. These updates were communicated to all subgrantees via e-mail in April 2014 and at our Annual Meeting in May 2014. Attendance at the Annual Meeting is mandatory for all subgrantees.

In January 2015 a list of draft Weatherization Field Guide changes and SWS variance requests was reviewed by the Wisconsin Technical Development Work Group (TDWG). TDWG is composed of subgrantee technical staff and is facilitated by the Wisconsin Energy Conservation Corporation, an IREC Accredited Training Provider, through a training and technical assistance contract with the Division. In February 2015 the Division presented proposed PY 2015 program and policy changes at the annual Home Energy Plus Conference, including a summary of the SWS timeline and draft Program Manual language. The annual session is attended by subgrantee staff including program managers and directors. The updated Weatherization Program Manual and Weatherization Field Guide will be distributed electronically to all subgrantees via broadcast e-mail and available on the Home Energy Plus website on or before July 1, 2015. A signature on the contract will serve as proof of receipt.

The Division provides follow-up and clarification upon request through our Help Desk (via e-mail and telephone), through broadcast e-mails sent to all subgrantees, and at bimonthly Weatherization Operators of Wisconsin organization meetings.

#### V.5.2 Energy Audit Procedures

**Single-Family:** Energy audit procedures and related protocols and standards were approved by DOE on March 7, 2013.

**Manufactured Housing:** Energy audit procedures and related protocols and standards were re-approved by DOE on March 7, 2013.

**Multi-Family:** Wisconsin received re-approval to use NEAT (Version 8.6 or higher) to model 5 to 24 unit buildings on March 7, 2013. Wisconsin's package of 25+ unit energy audit procedures, measures specifications and standards was approved by DOE on June 1, 2011.

#### One to Four Unit Buildings

Wisconsin models all 1 to 4 unit buildings with NEAT (Version 8.9). Each energy conservation measure must have an SIR of at least 1.0 and the total job SIR must also be at least 1.0.

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#### Manufactured Housing

Wisconsin uses MHEA (Version 8.9) to model manufactured homes. All energy conservation measures must have an SIR of at least 1.0. The total job SIR must also be at least 1.0.

#### Multifamily

The TREAT audit (Version 3.0 or newer) is used to model buildings with 25 units or more.

#### V.5.3 Final Inspection

A final inspection by subgrantee staff is performed on every unit prior to reporting the unit as completed [440.16(g)]. When feasible, the final inspection will not be performed by the person who did the initial energy audit of a property. Also, the final inspection is performed by someone other than staff who performed the weatherization work. The Division recommends subgrantees to perform “real-time” final inspections when possible, a process improvement initiative to have the final inspector on-site on the last day of scheduled crew work. This improves responsiveness and efficiency of program operations by allowing crew workers to immediately address unsatisfactory work.

#### WPN 15-4 Section 3: Inspection and Monitoring of Work Using Guidelines and Standards

All subgrantee final inspections for completions reported in PY 2015 and beyond will be performed by certified Quality Control Inspectors as outlined in WPN 15-4 Section 3, or by a staff person in the process of obtaining QCI certification. Wisconsin is implementing a Grantee-Developed Quality Control Inspection Policy to ensure compliance with WPN 15-4. The Division’s goal is to have a sufficient number of certified QCI professionals in the subgrantee network so that the certified QCI performing the final inspection did not perform the initial energy audit and was not a crew member who completed the weatherization work. Until a sufficient number of certified QCI professionals are on staff at each subgrantee, the Division will provide subgrantees three options for final inspection procedures in PY15:

- Final inspections are performed by a certified QCI professional who did not perform the initial energy audit and was not a crew member who completed the weatherization work. Quality assurance reviews will be performed on at least 5 percent of completed units.
- Final inspections are performed by a certified QCI who also performed the initial energy audit but was not a crew member who completed the weatherization work. Quality assurance reviews will be performed on at least 10 percent of completed units.
- Final inspections are performed by an inspector in the process of obtaining QCI certification (is a BPI registered candidate). Quality assurance reviews will be performed on at least 10 percent of completed units.

As of April 15, 2015, Wisconsin has 22 QCI certified staff in the Weatherization Assistance Program network: 18 subgrantee staff and 4 employees of subcontractors that complete monitoring visits (see Section V.8.3 Monitoring Activities). The Division’s goal is to have at least two certified QCI on staff at each subgrantee, where reasonable, and the Division is working with subgrantees to increase the number of QCI certified staff. QCI trainings and exams are being proctored by the Wisconsin Energy Conservation Corporation (see Section V.8.4 Training and Technical Assistance Approach and Activities), an IREC accredited training provider. The Division will be monitoring certification through the BPI website and certification dates provided by subgrantee staff to validate QCI credentials.

Inadequate inspection practices will be identified by Wisconsin’s Quality Assurance staff during monitoring visits (see Section V.8.3 Monitoring Activities). Disciplinary actions for inadequate inspection practices will be reviewed on a case-by-case basis. When disciplinary action is warranted, a corrective action plan will be developed based upon the significance of the finding.

Electronic copies of relevant policies and procedures that will govern the quality control inspection process in accordance with WPN 15-4 Section 3, and copies of the inspection forms that will be used to ensure work is completed in accordance with WPN 15-4 Section 1 are attached to this application.

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#### V.6 Weatherization Analysis of Effectiveness

Quality assessment is the ongoing process of establishing clear, measurable expected outcomes of weatherization technology. The Division of Energy Services continues to gather and analyze data on housing types, frequency of measures installed, ranges for costs of installed measures and the direct effect of the installed measures. Much of the data is provided directly by subgrantees in the individual job reports completed in the Wisconsin WAP online reporting database, WisWAP. Reports are generated to assist Division Quality Assurance staff with unit selection to ensure the on-site monitoring visits will create the best opportunities to review measures that may need improvement at a local level, or to review jobs that may have higher measure costs. This allows Division staff to determine what training might improve local grantee quality of work. During the on-site visits, customers are often interviewed to verify customer understanding of completed work and satisfaction level.

Division staff works directly on measure value and quality assessment with the Energy Center of Wisconsin (ECW) and Wisconsin Energy Conservation Corporation (WECC). The outcome of the evaluations may be used to develop training curriculums and adjustments in measures provided. The Self Evaluation Savings (SES) study conducted annually for our program provides critical data on the projected energy and monetary savings of weatherization work performed. Through this study, the Division can compare savings and costs among the sub-grantees, and use that information to help determine what best practices are being used at some agencies, and which agencies may need special assistance to improve.

Communication is an essential part of the process. The Division participates with subgrantees in a variety of venues including the state association for Community Action Agencies (WISCAP), Weatherization Operators of Wisconsin (WOW), and the Hudson group (mostly comprised of energy auditors and production managers from subgrantee weatherization programs). These groups encourage open discussion regarding ways to improve low-income weatherization services and provide a setting to inform grantees of program modifications. The Division supports the formation of focus groups to support the development of energy related technology such as the Technical Development Work Group (TDWG). Such groups provide technical support and data to validate proposals.

The Division sponsors annual and periodic Grantee Meetings for specific needs to ensure all subgrantees receive information regarding contract and policy updates. Attendance at Grantee Meetings is required.

#### V.7 Health and Safety

##### A. Comprehensive Health and Safety Plan

The Division has reviewed in detail DOE's Weatherization Health and Safety Guidance provided in WPN 11-06. Wisconsin's Health and Safety policy has been in place since 2005, and has evolved as new information and materials become available. We are currently in compliance with the requirements outlined in WPN 11-06.

The Division sets overall Health and Safety (H&S) policy for the Weatherization Assistance Program in accordance with DOE's regulations and guidance. Wisconsin acknowledges that within those policy guidelines there are other local, state, and federal authorities that have jurisdiction over specific hazards and how those hazards must be addressed. The requirement to meet all applicable regulations and codes is referenced in the Wisconsin Field Guide and in numerous citations in the state's Weatherization Program Manual. To meet multiple H&S requirements, DES provides resources and policy guidelines for addressing weatherization related H&S repairs, safety equipment, training and technical support.

The Division provides its weatherization subgrantees with an allocation of funds, identified as a budget line item, to be used for required H&S activities on buildings being weatherized. H&S costs are budgeted as a separate category. The H&S budget is \$350,000 or 7% of the subgrantee allocation. The ACPU is \$7098.35, 7% would equal an average of \$497 per dwelling unit for health and safety. Multiple funding sources are used for H&S repair measures, including DOE WAP funds. The Division restricts the use of WAP funds to DOE allowable activities through a reporting mechanism in WisWAP that limits which funds can be allocated to each measure. Furthermore, WisWAP system controls are in place to ensure the Grantee cannot charge to a non-allowed DOE H&S activity. H&S related measures are reported separately in the WisWAP reporting system. The purchase and maintenance of personal protective equipment and other safety

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equipment is allowed. Each grantee has a local Training and Technical Assistance budget and those funds may be used to provide training and certifications as needed to address H&S issues.

Wisconsin defines Health and Safety measures as the cost of materials and labor needed to eliminate or reduce hazards existing before, or potentially resulting from the installation of weatherization materials. To control costs and ensure that these measures are considered in the context of the weatherization work being done, whenever the estimated costs for H&S measures exceed \$1,000, they must be included in the building's Savings to Investment Ratio (SIR), and the building SIR must be 1.0 or greater. Ventilation costs for indoor air quality are exempt when calculating the \$1,000. Buildings that cannot be weatherized without the H&S measures must be deferred.

Wisconsin's guidance to subgrantees is to model all H&S measures as an energy conservation measure first, prior to designating it as an H&S measure. While the cost of H&S measures may be modeled with a specific energy conservation measure, they are charged to a separate budget cost category in our WisWAP reporting system. This allows DES to track and manage all H&S costs.

All Wisconsin WAP subgrantees are required to carry workers compensation and contractor liability insurance. Subcontractors are required to provide proof of insurance to the subgrantees prior to working on any dwellings. Wisconsin does not require that subgrantees have liability insurance for mold. Pollution Occurrence Insurance is strongly recommended to subgrantees.

#### **B. Client Health and Safety**

Subgrantees are required to identify Health and Safety hazards during the energy audit/assessment, notify the property owner and occupants of these hazards and, depending on the type and extent of the problem, eliminate the identified hazards when they are present prior to or during weatherization activities. The Health and Safety Checklist is required for every job, and includes the customer name, address, and date of inspection. It is signed by the customer, the building owner, and the energy auditor or inspector and maintained in the customer file. This document includes hazards identified in the home and indicates whether they may be addressed through the weatherization program. As stated previously, if the H&S hazards cannot be eliminated, service to the building must be deferred (see section D, below).

All customers receive the EPA informational pamphlets "A Brief Guide to Mold, Moisture and Your Home," "The Lead-Safe Certified Guide to Renovate Right," and "A Citizen's Guide to Radon." Customer signatures are obtained to verify receipt of these items. When appropriate, additional educational materials such as the EPA booklet, "Indoor Air Hazards" may be provided to customers.

#### **C. Crew and Contractor Health and Safety**

Crew and contractor safety is the responsibility of the subgrantee. In contracting with the subgrantees, the State of Wisconsin assumes compliance with all applicable federal, state, and local safety and health regulations. The Wisconsin Weatherization Program Manual includes a written policy stating services shall be deferred when the dwelling or household presents a serious crew safety concern. The subgrantee is responsible for enforcing all work rules to ensure a safe working environment for the workers, customers, and subcontractors.

The subgrantee is responsible for ensuring workers and subcontractors are properly trained and certified when certification is required. As stated above, DES allocates a local Training and Technical Assistance budget and provides direct trainings statewide via a subcontractor. We provide ten and thirty-hour OSHA construction safety training and will continue to offer this course as needed. Wisconsin also has an internet-based MSDS system for worker access to all current data sheets.

The State of Wisconsin requires subgrantees to purchase and equip their crews and energy auditors with the appropriate personal protective equipment necessary to perform work tasks. Supplies and equipment purchased may include respirators, protective coveralls, safety glasses, HEPA vacuums, supplied air respirator systems, and other safety needs. Wisconsin also specifies that respirator training and fit testing are required of crew personnel and other local staff as applicable.

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Administrative reviews of subgrantees include verification that OSHA worker safety requirements are being implemented (MSDS, Personal Protective Equipment, lead and asbestos compliance, etc.). Onsite monitoring also includes checks that worker safety requirements are followed at in-progress jobs. Failure to comply with all state and federal safety and health regulations may result in the suspension or termination of the weatherization contract.

#### D. Deferral of Service

Wisconsin has a well-established set of deferral standards. Wisconsin has a standardized Deferral of Service Notification form which is used to document and notify applicants of conditions that require service to be deferred. The applicant receives a written notification within five working days of the decision to defer service. The form includes the customer name and address and the date of inspection. Also included with the notice are a specific description of what issues need to be addressed for work to proceed, and the subgrantee's applicant appeal procedures. The form is delivered in person or sent by mail. When service is deferred, the owner or occupant shall be given a reasonable timeframe to correct the problem. Examples of the reasons for the deferral of services include health and safety problems which drop the building's cumulative SIR below 1.0, standing water, pervasive mold, uncontrolled sewage, or animal feces.

#### E. Disposal of Hazardous Materials

This requirement is addressed in specifications in the Weatherization Manual (Appendices B, C, D, E, and F). Specific costs may be addressed as part of the measures costs or may be included as a health and safety cost. Examples include, 1) Proper disposal and recycling of replaced refrigerators is included in the replacement bid specifications, and 2) Proper disposal of ACM is included with the asbestos health and safety costs.

#### F. Health and Safety Issues

##### 1. Air Conditioning and Heating Systems

Air conditioning installation or replacement is currently not allowed. Heating system replacement and repair for health and safety is allowed, and must be modeled with the electronic energy audit. Subgrantees are required to use a heating system sizing calculator which takes into account climatic conditions. These include REScheck, ACCA Manual J, or an equivalent industry accepted sizing formula.

##### 2. Appliances and Water Heaters

Current policy allows for appliance repair, replacement or installation. Water heater replacement as a health and safety measure is allowed, and must be modeled with the electronic energy audit.

##### 3. Asbestos - in siding, walls, ceilings, etc.

As part of every building assessment, subgrantee energy auditors are trained to identify potential asbestos containing products, and will notify the program participant of the existence of any suspect or presumed asbestos containing material (ACM) that may represent a hazard or will be disturbed during weatherization. The State of Wisconsin requires subgrantees to have all field staff trained in Asbestos Operations and Maintenance (O&M) at a minimum. This training allows an installer to work safely around asbestos in the course of the weatherization work if there is limited disturbance.

Under the program's Asbestos Containing Materials Policy and Procedures, subgrantees are allowed to complete higher levels of asbestos training to ensure compliance with EPA, OSHA, DOE, HUD, and Wisconsin Department of Health Services regulations. The higher level training will reduce the potential for deferral of some of Wisconsin's highest energy usage households. The policy requires at least one certified Asbestos Supervisor/Inspector at each agency that is responsible for ensuring workers receive O&M training, use proper procedures and equipment, and who can determine when a job exceeds O&M levels. The complete asbestos policy can be found in the Wisconsin Weatherization Program Manual.

Any disturbance of more ACM than is allowed with O&M training must be completed by certified Asbestos Workers and Supervisors. If weatherization program funds are used for this work, the cost must be included in the cost of the measure,

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and the total cost must be modeled with a DOE approved computerized energy audit and carry a SIR of 1.0 or more for the measure and the job. If completion of the asbestos work and the measure do not generate an SIR of 1.0 or greater, the energy auditor will refer the participant to other rehabilitation programs for alternative assistance. If a major weatherization measure cannot be completed due to ACM, the unit may require deferral.

#### **4. Asbestos – in vermiculite**

Subgrantees are required by the Wisconsin Department of Health Services (DHS) to treat vermiculite insulation as ACM. Subgrantees are instructed to minimize disturbance of vermiculite when completing weatherization and may insulate over it where feasible, but not remove it.

#### **5. Asbestos - on pipes, furnaces, other small covered surfaces**

Any disturbance of more ACM than is allowed with O&M training must be completed by certified asbestos Workers and Supervisors following all applicable regulations of authorities having jurisdiction.

#### **6. Biologicals and Unsanitary Conditions - odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.**

Subgrantee audit staff has the responsibility as part of the energy audit/assessment process to identify biological hazards such as mold, odors, raw sewage, or rotting wood. Energy auditors must take any conditions identified into consideration in the selection of measures appropriate for that building. In instances where the hazard is of such a severity as to cause undue safety or health concerns to crews, subcontractor staff, or occupants, the auditor is authorized to defer weatherization until the hazard has been addressed.

#### **7. Building Structure and Roofing**

The State of Wisconsin actively encourages subgrantees to work with all available building repair and rehabilitation programs. Many subgrantees have funding for these services in-house. Wisconsin does allow for incidental repairs necessary for the effective performance or preservation of weatherization materials as discussed previously.

#### **8. Code Compliance**

Wisconsin delegates the responsibility of local and state code compliance to its subgrantees. Subgrantees have the responsibility to obtain any permits necessary to perform required weatherization work. Fees for these permits are an allowable expense to the weatherization program. To ensure compliance with appropriate codes, onsite monitoring of the weatherization work performed may be conducted. Training is offered in the Wisconsin Uniform Dwelling codes, National Fuel Gas code, and applicable National Fire Protection Association model codes. State or national code requirements are referenced in Wisconsin's Weatherization Program Manual and Field Guide, where applicable.

#### **9. Combustion Gases**

As part of Wisconsin's Air Sealing and safety protocols, the State requires a "test in/test out" standard of safety testing on naturally drafting combustion appliances, as well as the dwelling. All combustion appliances must be inspected prior to weatherization work commencing, and upon completion. Identification of the presence of combustion gases (such as carbon monoxide) is part of the energy auditor's responsibility in the audit/assessment stage of weatherization, the weatherization installers during weatherization work, and the HVAC installer when work is completed on the appliance. Energy auditors and inspection staff, as well as crew leaders, have been trained in the use of gas detectors and the techniques for identifying the presence of combustible gases, as well as combustion gases. If the presence of a gas is an imminent threat to the safety of workers and occupants, the utility or gas company must be notified immediately and the building evacuated. Ambient carbon monoxide will be monitored during combustion and draft testing.

In addition, Wisconsin requires that before and after all weatherization work is completed, a "worst case draft" test is performed to ensure that flue gases are not back-drafting into the building. This is accomplished by putting the building into a negative pressure, worst case draft condition and determining if any flue gases are venting into the building. Measurements are made and recorded for later use if necessary. If back-drafting occurs, remediation is required and further tests conducted until the situation is corrected. State of Wisconsin Quality Assurance staff spot check weatherized buildings to ensure that these procedures have been followed. In instances where non-weatherization related combustion appliances are deemed a hazard, the customer is notified of the issue, informed of what steps may be taken to remedy it, and referred to additional funding sources if needed.

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#### **10. Drainage - gutters, down spouts, extensions, flashing, sump pumps, landscape, etc.**

This topic is addressed in the Mold and Moisture and energy auditor training. The Health & Safety Checklist, Part 2 - Moisture Audit provides a place for the energy auditor to document site conditions for the customer and the file.

#### **11. Electrical, other than Knob-and-Tube Wiring**

All replacement heating systems must be on a dedicated circuit. That cost must be factored into the cost of the heating system or the job SIR. When serious deficiencies are present in the existing electrical system, such as an overloaded circuit, subgrantees are required to inform the occupants and owner of the unsafe condition and offer information on other available rehabilitation program resources. No additional load may be added to an already overloaded service. Weatherization services must be deferred if such a condition exists until the condition is remedied.

#### **12. Electrical, Knob-and-Tube Wiring**

The Wisconsin WAP, in compliance with the state's electrical code, prohibits the insulation of sidewall cavities with live knob and tube wiring present. In attics and other accessible areas, tenting is required with a minimum of 3 inches of free air clearance around the wiring. All knob and tube wiring is tested to determine if it is still being used to distribute power. In some instances, where an energy audit cost benefit analysis indicates a 1.0 or greater savings to investment ratio (SIR), rewiring of the wall cavities or attics is included as part of the sidewall or attic insulation measure. This work is performed as required by state and local code. When necessary, subgrantees may defer weatherization work until a rehabilitation program replaces the knob and tube wiring. Subgrantees are encouraged to "piggy-back" with rehabilitation programs for aid in removing knob and tube wiring.

Note: Contingent on DOE review of Standard Work Specifications variance request.

#### **13. Fire Hazards**

The Wisconsin WAP references the National Fuel Gas Code and the National Fire Protection Association's standards in its training curriculum and standards for installation of combustion appliances. These codes establish minimum clearances from combustible materials for the different components of these appliances.

#### **14. Formaldehyde, Volatile Organic Compounds (VOCs), and other Air Pollutants**

Subgrantee energy auditors have responsibility for identifying situations where new carpeting and other products are out-gassing potentially harmful by-products and making appropriate adjustments in the air sealing measures. Currently, Wisconsin Air Sealing Protocols includes adjustments for harmful indoor air quality situations such as smokers being present or the presence of formaldehyde or VOC's. Identifying the presence of formaldehyde or VOC's is included as part of Wisconsin's training of energy auditors. In addition, ventilation is used to address low-level indoor air pollutants.

#### **15. Injury Prevention of Occupants and Weatherization Workers**

Problems that would put our field staff at risk usually result in the building being deferred. Hazards that are identified but not addressed are to be noted on the Health & Safety Checklist. The cost of incidental repairs, if such repairs are necessary to make the installation of weatherization materials effective, are allowable costs when electronic auditing requirements have been followed as required. Examples include measures such as repairing stairs and replacing handrails.

#### **16. Lead Based Paint**

In accordance with DOE's Lead Safe Weatherization guidelines, Wisconsin's lead policy is that unless a building is certified as "lead-free" all weatherization activities conducted on dwelling units constructed prior to 1978 (target housing) or a child occupied facility (built prior to 1978) shall be performed utilizing lead safe work practices. Subgrantees may also now test painted components with a lead test kit recently approved by the Wisconsin Division of Health Services (DHS) and the EPA. Subgrantees and their subcontractors must also follow the EPA's Lead Renovation Repair and Painting Program (LRRPP) Final Rule when applicable. Wisconsin trains subgrantee staff and subcontractors in Lead Safe Weatherization. Additionally, many are trained and certified as Lead Safe Renovators. Every subgrantee has certified Lead Safe Renovators on staff and all subgrantees are a certified Lead Safe Company (unless they are exempt). The Division has a Minimum Standards for Lead Safe Weatherization policy which is intended to clarify the dual DOE and EPA guidelines, and provide cohesive guidance for meeting both. The complete policy can be found in our Weatherization Program Manual.

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The State of Wisconsin Department of Health Services (DHS) received approval from EPA to enforce compliance, and provide training and certification for lead safe renovation through State of Wisconsin, DHS Chapter 163. This statute meets the EPA requirements, and there are some areas where Wisconsin's DHS 163 is more restrictive than EPA's requirements. If there are discrepancies between EPA standards for lead safe procedures and the requirements of DHS 163, the latter will take precedence. Weatherization work follows the most restrictive requirements of the authorities having jurisdiction.

#### 17. Mold and Moisture

Due to the uniqueness of the mold hazard, energy auditors are required to take special care in identifying the presence or conditions that could lead to the presence of mold. Wisconsin's Basic Energy Auditor Curriculum devotes an entire unit to moisture control. They must make a visual inspection of the building and identify any location with the presence of mold. In addition, they are required to document the presence of moisture and mold by completing the Moisture and Mold Checklist, part two of the Health and Safety Checklist referenced above. That checklist must be reviewed and signed by the customer and retained in the client file.

In those instances where mold is present, energy auditors are required to inspect the property for possible sources of moisture including air or water leaks, poor thermal barriers, and excessive moisture in the building due to improper ventilation. They are required to inform the participant of the hazards of mold and provide them a copy of the EPA pamphlet entitled, "A Brief Guide to Mold, Moisture and Your Home." Program funds may be used to minimize or eliminate mold causing conditions in conjunction with the installation of energy conservation measures. Mold areas identified that comprise in total less than 10 square feet are not required to be addressed as a part of weatherization. In severe cases, weatherization work must be deferred until the mold hazard has been eliminated.

A second unit of the Basic Energy Auditor curriculum addresses air sealing and diagnostic procedures, with an overview of building tightness testing, depressurization limit testing, worst-case draft testing, carbon monoxide testing and Wisconsin's Deferral of Service policy.

Wisconsin's Weatherization Field Guide, which is focused on installers, deals with moisture control in several sections including Building Shell Measures, Diagnostics Procedures, Mechanical Systems, and an extensive chapter on Health and Safety procedures. The State works with its Technical Development Work Group and training and technical assistance sub-contractor to update the Field Guide as needed.

As a standard of field practice, every building is assessed for building tightness and ventilation requirements using software based on the ASHRAE 62.2 and ANSI Standards. This software models the building for tightness and identifies the amount of ventilation to install, if needed. Subgrantees are also required to have equipment to measure the rate of exhaust ventilation and moisture meters.

#### 18. Occupant Preexisting or Potential Health Conditions

In addition to the notification of existing or potential hazards, the subgrantees require disclosure from customers if there is any sensitivity of the occupants to weatherization materials proposed for the unit and informs the participant of the possible effects of the materials or the post-weatherization conditions of their building. When customers are sensitive to certain weatherization materials or conditions, the related measure may be waived without penalty to the program participant. Whenever possible, it is the responsibility of the subgrantee to devise ways of installing materials to reduce the exposure of the participant or other occupants so that weatherization work may be performed. Possible approaches could include temporary containment areas, HEPA filtered equipment, temporary removal of the individuals that are sensitive to the materials, or alternative installation methods or materials that meet the specifications of the program.

Customer education is an allowable T&TA expense and the Weatherization Customer Guidebook includes H&S information that is site and customer specific. Customers receive specific information when lead hazards, asbestos, or mold is noted in their homes. That information includes both federally required documents and specific information about their home (on the Health and Safety Checklist).

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**19. Occupational Safety and Health Administration (OSHA) and Crew Safety**

To comply with the Hazard Communication Standard (29 CFR 1910.1200), an internet-based Safety Data Sheet system is available for worker access to all current data sheets via Wisconsin's technical assistance contract. Safety Data Sheets are required to be available to workers in printed or digital format, and the information contained in them shall be readily accessible from a work site (Weatherization Program Manual 12.1.3 Worker Safety). All subgrantee staff are trained to applicable OSHA standards. WECC developed an internet-based OSHA GHS Training Module that is available to all Local Training Officers. Ten and thirty-hour OSHA construction safety trainings are provided regularly, as needed for subgrantee staff.

**20. Pests**

Pest infestations are covered by Wisconsin's Deferral of Service form, "Evidence of infestations of rodents, insects, and/or other vermin." (Wx Manual, Appendix E)

**21. Radon**

Wisconsin's field policies require both covering of dirt floors and limiting the amount of negative pressure in the building (therefore discouraging radon to be pulled from the soil or through floor drain). We provide ventilation in the living area of the home which generally pulls fresh air into the home from the outdoors (as opposed to the soil).

In instances where elevated levels of radon have been identified, the energy auditor will defer such weatherization measures that could exacerbate the problem. Weatherization measures that are identified as being cost effective for the dwelling and will reduce the exposure to radon, such as duct sealing in the basement area and air sealing are encouraged. This policy will be reviewed and revised as necessary based on published results of the DOE National Evaluation Air Quality study. All customers are provided the EPA pamphlet, "A Citizen's Guide to Radon."

**22. Refrigerant**

Wisconsin requires subgrantees to comply with state and federal requirements for the safe and legal disposal of refrigerators. Freon reclamation for replaced refrigerators by state licensed contractors prior to their disposal in an approved licensed landfill is specified in subcontracts for refrigerator replacement. Refrigeration appliances that are replaced must be disposed of according to the environmental standards in the Clean Air Act (1990), Section 608, as amended by Final Rule, 40 CFR 82, May 14, 1993. The local agency, appliance vendor, de-manufacturing center, or other entity recovering the refrigerant must possess an EPA-approved section 608 type-I license or an approved universal certification.

**23. Smoke, Carbon Monoxide Detectors, and Fire Extinguishers**

The Health and Safety Inspection shall identify the presence of working smoke detectors, as required. Smoke detectors must be installed in the basement and on each floor in the thermal envelope of the building. Subgrantees install carbon monoxide alarms in the vicinity of sleeping area(s).

Note: Contingent on DOE review of Standard Work Specifications variance request.

**24. Solid Fuel Heating (Wood Stoves, etc.)**

Replacement of wood-fueled primary heating systems is considered a Health and Safety measure. Secondary heating systems may be replaced if the system is a safety hazard and cannot be eliminated with the replacement of a primary system. The replacement of the secondary heating system is modeled as a Health and Safety measure with the NEAT audit.

**25. Space Heaters, Stand Alone Electric**

Repair, replacement, or installation of stand-alone electric space heaters is not allowed as health and safety or energy conservation measure.

**26. Space Heaters, Unvented Combustion**

Weatherizing a home with an un-vented space heater is not allowed. Un-vented space heater(s) that may have a harmful effect on the air quality of the home is identified as a reason for deferral of service.

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#### 27. Space Heaters, Vented Combustion

Vented combustion space heaters are inspected and tested for safety and efficiency. Unsafe space heaters may be replaced as an energy conservation measure or a health and safety measure if cost effective based on modeling it with the electronic energy audit.

#### 28. Spray Polyurethane Foam (SPF)

Based on EPA and OSHA guidelines, agencies shall address the following issues related to the use of Spray Polyurethane Foam: 1) Hazard Communication 2) Limit Access to Area 3) Personal Protective Equipment 4) Ventilation 5) Flammability 6) Clean up. More detailed guidance is provided in the Weatherization Program Manual, Section 12.5. Training is provided to subgrantees on safe and proper use of SPF.

#### 29. Ventilation

Wisconsin will use ASHRAE 62.2-2013 for DOE funded units.

#### 30. Window and Door Replacement, Window Guards

Replacement of doors and windows are modeled with an energy audit as either an energy conservation measure or a repair. The replacement must have a savings to investment ratio greater than or equal to 1.0 to be a conservation measure. The job must have a savings to investment ratio greater than or equal to 1.0 for a repair.

### V.8 Program Management

#### V.8.1 Overview and Organization

The Division of Energy Services is located in the Wisconsin Department of Administration. The Division contracts with Community Action Agencies and a variety of public and non-profit entities to deliver weatherization services. Many of these subgrantees also administer housing programs such as the HUD HOME funded programs (including rehab and first time homebuyer). This results in a comprehensive set of services being offered to the state's low-income customers.

In addition to the Low-Income Weatherization Assistance Program, DES also houses the Low-Income Home Energy Assistance Program. Together, these low-income assistance programs make up Home Energy Plus. The Division also maintains close working relationships with the state's utilities to ensure coordination of services between programs offered by utilities and the state's Weatherization Assistance Program.

The Division retains staff to conduct on-site monitoring of contracts, field inspections of projects, and provide technical assistance and oversight to subgrantees.

The Low Income Energy Advisory Committee (LIEAC) is established to meet the requirements of 440.17. As required by 440.17(a)(1,2,3), membership is selected for special qualifications and sensitivity to the problems of low-income persons, including their weatherization and energy conservation needs. Membership is also broadly representative of organizations and agencies, including consumer groups that represent low-income persons in their area – particularly the elderly, disabled, and Native Americans. The committee has responsibility for advising DES on the development and implementation of its Weatherization Assistance Program.

#### V.8.2 Administrative Expenditure Limits

Administrative expenditures are limited to 10% of the total DOE grant allocation and split 5% to State Administration and 5% to Grantee Administration.

#### V.8.3 Monitoring Activities

Monitoring is completed to determine whether subgrantees are operating the program according to DOE rules and regulations, policies established by DES, and to determine local training needs. The monitoring activities described in this plan apply to DOE funded activities.

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The Division's Quality Assurance (QA) Section staff conducts monitoring of subgrantees. The in-house QA Section includes two administrative review monitors, five field monitors, one support staff and the section chief. All monitors receive the following trainings and related certifications;

- Lead Safe Weatherization
- Lead Renovator
- Asbestos Operations and Maintenance
- Weatherization Assistant training
- Quality Control Inspector

In accordance with WPN 15-4 Section 3, the Division's QA Section staff will be included in the QCI training plan summarized in Section V.5.3, with the goal of having all field monitors QCI certified by July 1, 2015. Electronic copies of the following are attached to this application: relevant policies and procedures that will govern the quality control inspection process in accordance with WPN 15-4 Section 3; inspection forms that will be used by Grantee monitors to ensure work is completed in accordance with requirements outlined in WPN 15-4 Section 1.

In addition, many of the QA staff receive further trainings and certifications depending on their monitoring focus. Examples include Asbestos Supervisor, forced air heating systems, boilers, procurement, process improvement, air sealing, mobile home weatherization, ventilation, and OSHA construction. The QA section also includes individuals with extensive experience managing subgrantee weatherization programs, construction backgrounds, and engineering or architectural backgrounds. Both administrative review staff and field monitors complete extensive file reviews.

In addition to QA Section staff, one or more technical inspection subcontractors will be used as needed to complete additional on-site reviews. In July 2014 the Division entered into two contract agreements for technical inspection services: a two-year contract agreement with the Wisconsin Energy Conservation Corporation (WECC), and a one-year agreement with Energy House, Inc., which includes a stipulation that all contractor staff completing inspections shall obtain QCI certification by July 1, 2015. WECC has four certified QCI on staff performing technical inspections for the Division. The subcontractors, under the direction of QA Section staff, evaluate units to determine if they were appropriately weatherized and if the quality of the workmanship meets the standards established by DOE and DES. Although the subcontractors may conduct on-site evaluations of units weatherized, subgrantee oversight will continue to be primarily the responsibility of DES and part of the QA Section's duties. The Weatherization QA Section staff will conduct follow-up inspections where required. Subgrantees are not allowed to use additional DOE funds on reported jobs that require reworks or warranty work.

Training and Technical Assistance (T&TA) funds pay for 5.15 QA Full Time Equivalent (FTE) positions. DES uses Leveraging Funds to pay for 3.40 QA FTE positions. The remaining DES QA FTE positions are paid with non-DOE funds from other sources.

The estimated travel costs for monitoring efforts for July 1, 2015 – June 30, 2016 is approximately \$40,000. Estimated travel costs for monitoring efforts will be funded by T&TA and Leveraging funds. The remaining portion of expenses will be paid out of non-DOE funds.

The Division is responsible for monitoring and oversight of work performed by subgrantees and will visit each subgrantee at least annually. More frequent QA reviews will be performed if quality issues are discovered during initial visits. A minimum five percent sample of each subgrantee's DOE funded units will be inspected. As noted in Section V.5.3, a minimum of ten percent of each subgrantee's DOE funded units will be inspected if the final inspection and the initial audit are completed by the same subgrantee staff person, and if the sub-grantee inspector is in the process of attaining QCI certification but has not yet achieved certification. If significant deficiencies are discovered concerning health and safety violations, poor quality of material installation, or major services missed, DES will increase either the number of homes visited, or increase monitoring of subgrantee contract management practices as applicable until the deficiencies are remedied. As referenced in the training plan, agencies that have significant deficiencies will be referred to receive Rapid Response Training, Production Based Training, or be required to attend training activities provided through the Standard

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Training Plan or other specialized technical assistance to improve performance. Required grantee staff qualifications and training are tracked by our T&TA subcontractor and compliance is verified during Administrative Reviews by DES staff.

The Division has a dedicated Quality Assurance monitor that provides training and technical assistance related to program management. This monitor has over 17 years of management experience in the Weatherization Assistance Program and assists subgrantees with issues such as management of program support costs, budgeting, supervision of field staff, and client complaints.

To ensure initial energy audits are performed appropriately the Division has implemented an on-site monitoring program with the purpose of improving the accuracy of estimated costs and work orders. A Division staff person observes each subgrantee auditor in the field and entering data into Weatherization Assistant. The Division staff person assesses the auditor's performance, recommends areas for improvement and identifies customized training needs.

Comprehensive monitoring of subgrantees is conducted as a three-part set of activities to meet the annual assessment requirement. The combination of these monitoring activities in conjunction with periodic report assessments provides an in-depth look at all program components. Monitoring checklists and tools used by both Administrative Review (AR) and field monitoring staff are attached. The QA Section completes all three sets of activities for each subgrantee, which are:

1. Administrative review
2. Dwelling inspections
3. Client file reviews

**Activity 1:** The administrative review covers the general operations of the subgrantee with a comprehensive approach to programmatic, financial, and management monitoring. This includes a review of subgrantee financial management, accounting systems and operations, invoicing, purchasing and procurement procedures, inventory tracking, payroll and personnel, subcontractor management and quality assurance monitoring methods, vehicle and equipment lists, health and safety policies, record retention, quality assurance procedures and additional aspects of local program administration and organization. Checks are made that financial procedure manuals exist and are followed. Included in the monitoring of the fiscal operations of the subgrantees is a review of cost allocation plans. Desktop monitoring of WisWAP system reports and reports submitted by the subgrantee in advance of the on-site administrative review contribute greatly to the information profile of the agency.

On-site staff will check a sample of materials to confirm that they meet or exceed specifications. On-site staff will also check the subgrantee's purchasing records to see that appropriate documents are maintained demonstrating that the materials purchased meet or exceed specifications. The administrative review combined with the fiscal audit give the Division an overview of the subgrantee's administrative capacity and capability. For subgrantees that maintain a warehouse, a spot check of Material Safety Data Sheet (MSDS) availability will be completed.

Data on production and expenditures are reviewed monthly to ensure that the statewide average cost per unit does not exceed expenditure limits and is in compliance with DES requirements. This data is available as needed by the QA Section from the WisWAP reporting database.

**Activity 2:** Dwelling unit inspections review the quality and appropriateness of work using criteria that align with the quality specifications outlined in WPN 15-4 Section 1, an assessment of the original audit, the accuracy and completeness of the pre- and post-work inspections, and other on-site items. Dwelling unit inspections include both in-progress and completed units, with particular emphasis placed on in-progress units and heating system replacement and repair. The Division will make additional on-site visits of work in-progress with all subgrantees to assess compliance with safe work practices, adherence to lead safe weatherization protocols, comprehensiveness of final inspections, and other applicable criteria. Training and technical assistance is provided during in-progress visits as needed. If imminent health or safety concerns are identified at a job site, the subgrantee will be required to address such issues immediately. The Division will make as many visits as necessary and for which resources are available.

The Division will subcontract on-site inspections to an outside source as needed to supplement the monitoring described above. The subcontractor will complete a Quality Satisfaction Questionnaire on each inspected home. Reports prepared

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by the subcontractor will be used to assist the Weatherization QA Section in meeting Quality Assurance goals. Both DES inspections and any subcontracted inspections are entered and compiled in the QA reporting database. Standard reports from this database guide monitoring inquiry and help DES to provide feedback to subgrantees.

**Activity 3:** Client file reviews verify the completeness of documentation among other items. Numerous criteria are evaluated for each file including customer eligibility, accuracy of the energy audit, completeness of work order and inspection certification forms, and compliance with health and safety requirements. Compliance with policies related to service of rental properties will be verified. File reviews include clients deferred or denied service.

The Division's monitoring goals for this program year for each subgrantee are:

1. All 20 subgrantees will have an administrative review conducted.
2. On-site inspection will occur on a minimum of 5% of the DOE funded units weatherized. Inspections will be completed at least quarterly.
3. Inspection of files will occur on a minimum of 5% of the DOE funded units weatherized.

In addition, each subgrantee is required to have a full financial and compliance audit conducted annually unless total federal funding is less than \$750,000. If less than \$750,000, an audit will still be completed but not paid for with DOE funds. The Division reviews the annual audit and takes any actions necessary to correct problems identified by the audit, resolve questioned costs, or recover funds if necessary.

Upon completion of a monitoring visit, the QA staff holds an exit conference with the subgrantee staff. Discussions are had concerning the findings of the visit. Exit conference topics include:

1. Programmatic strengths
2. Programmatic weaknesses
3. Training needs and recommendations
4. Deficiencies requiring immediate corrective action

A copy of the Division's QA report will be provided to the subgrantee within 30 days with any requirements specified. When minor issues are identified, they will be reported as "Concerns" and the subgrantee will be responsible for making sure the issue is addressed on future jobs. When other deficiencies are identified as not meeting program standards, subgrantees will be required to take corrective action within 30 to 45 days. When recurring deficiencies are identified, DES will determine what additional action is appropriate.

The Division's QA field monitors follow up on items addressed in Administrative Reviews on a regular basis throughout the year. If a subgrantee fails to resolve an issue, the Division reserves the right to take any of the following actions: modification, suspension, or termination of the contract.

It is DES policy to have follow-up telephone contact regarding any complaints about quality of workmanship. If additional investigation is required, an on-site visit will be completed to verify the quality of work being performed meets federal and state specifications. In the event the quality of the work was substandard, the subgrantee will be required to correct the deficiency.

A DOE report on successes and significant problems will be completed regarding the level of subgrantee monitoring, major findings and resolutions, training and technical assistance needs in all agency functions to include programmatic, administrative, technical, and financial areas. Agencies that are considered by the Division to be high risk due to extensive production or quality issues, financial issues, or program management issues may be required to create an action plan detailing improvement strategies. The Division will report on the status and success of agency improvement strategies and training. Sensitive or significant noncompliance findings, such as waste, fraud, or abuse will be reported to DOE immediately.

The Division is included in the annual State of Wisconsin Single Audit. The Weatherization Assistance Program is identified as a major program that is audited at least once every three years. Any audit finding is identified in a memo from the Legislative Audit Bureau to the Department of Administration prior to the issuance of the audit for a required Department response.

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#### V.8.4 Training and Technical Assistance Approach and Activities

The State of Wisconsin characterizes training activities as a specific deliverable training session or a system of training sessions, while technical assistance activities are characterized as program development projects or maintenance. Both training and technical assistance deliverables are driven by the overall objectives of saving energy and reducing the state's carbon dioxide and other greenhouse gas emissions. To reach those objectives, the provider network must deliver quality installations, at the lowest possible cost, to the greatest possible number of dwellings. Every training or technical assistance activity delivered is considered in the light of those objectives.

Wisconsin anticipates allocating approximately 17% of the new DOE funding for Training and Technical Assistance (T&TA). These funds are retained by the State or allocated to subcontractors that provide the following services, by percentage:

43% - State staffed monitoring and oversight of subgrantees.

21% - Statewide T&TA services including the training program, technical assistance and development projects, and Quality Assurance inspections.

36% - Subgrantees' local T&TA budgets.

Of the statewide T&TA services (21%) and subgrantees' local T&TA budgets (36%), we anticipate approximately 74% of DOE funds will be allocated for Tier 1 training and 26% will be allocated for Tier 2 training.

In September of 2013, the Division entered into a three-year contract agreement for Training and Technical Assistance services with the Wisconsin Energy Conservation Corporation (WECC).

As a part of the Training and Technical Assistance (T&TA) planning process, annual work plans are developed by WECC based on an annual subgrantee one-on-one training needs assessment, real-time surveys, and other DOE requirements, including but not limited to DOE Project Officer feedback. The work plans are reviewed internally by DES staff, the Weatherization Technical Development Work Group (TDWG), and various subcommittees of the Weatherization Operators of Wisconsin (WOW) organization. The work plan may be modified based on input from those groups.

Subgrantees are also required to develop an annual work plan. The local plans typically focus on training not available through the training contract, local training delivery systems, the costs of sending staff to trainings, and customer education.

#### Training Activities

Training is delivered through various mechanisms. Wisconsin's Tier 1 training program includes standard trainings encompassing occupation-specific training programs associated with the WAP Job Task Analyses. Wisconsin's Standard Training Plan provides a central training framework and addresses both short and long term training needs. The subgrantee T&TA plan, referenced above, provides funds to subgrantees for local training needs and initiatives.

Wisconsin's Tier 2 training program includes Production Based Training (PBT) and the biennial Technical Exchange Fair & Crew Competition Conference. The conference provides a venue for Wisconsin's weatherization professionals to showcase best practices and cost-effective solutions. PBT immediately targets subgrantees with deficiencies noted through Quality Assurance reviews and other performance factors, with the goal of providing training within a month of the referral.

The technical assistance work plan allows DES to provide one-to-one guidance on financial management, PBT, and the Weatherization Assistant energy audits. In accordance with WPN 15-4 Section 4, WECC has integrated the respective Job Task Analysis requirements into Wisconsin's existing training curriculum.

We anticipate that WECC will have full accreditation for Tier 1 Training by the beginning of PY15.

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#### Standard Training Plan

Administered and delivered by WECC, the Standard Training Plan provides specific trainings that are available each year. This training system provides courses at the basic, intermediate, and advanced levels for installers, energy auditors and inspectors, data management and support staff, and fiscal and program management staff. This allows Wisconsin to offer Tier 1 Training for all WAP personnel (as required by WPN 15-4, Section 4), as needed, based on the one-on-one reviews with the Subgrantees. Trainings cover 1-4 unit and 5+ unit site-built housing as well as manufactured homes, and include classroom and field components. Under the existing Standard Training Plan and funding level, the training system has the capacity to provide up to 1,400 training slots per year, with more than 60 training sessions. While a specific list of core trainings are delivered each year, the annual work plan will vary based on training needs assessments and funding levels.

As referenced above, subgrantees are required to develop an annual training and technical assistance plan for their allocation. As a part of the annual planning process, DES provides subgrantees with a list of potential trainings for the upcoming year. They are asked to identify any training needs in addition to the Standard Training Plan, within their T&TA plan. Commonly identified training needs are added to the annual plan. Uncommon subgrantee training needs must be supported by the subgrantee's local plan. Each subgrantee is required to designate a Local Training Officer (LTO) as a part of their T&TA plan. The LTO facilitates or provides local training, coordinates training for subgrantee employees and subcontractors, and works directly with WECC. Orientation and support are provided by WECC for the LTOs in assessing training needs, facility identification, and training skills development. Those LTOs that become successful trainers are added to the list of statewide trainers. The major responsibilities of the LTO are to:

1. Assist WECC to ensure that training is provided at the appropriate track and level for subgrantee staff.
2. Provide feedback and recommendations on trainings and related issues.
3. Contact WECC for PBT in response to Quality Assurance reviews.
4. Assist WECC in making arrangements for on-site facilities for Standardized Training Plan sessions held locally.
5. Work with WECC to provide training for other subgrantees, as needed and negotiated with the subgrantee.

#### Customized Training and Support: Production Based Training (PBT)

The PBT system, Wisconsin's Tier 2 Training program, was developed to provide immediate training for subgrantee staff and subcontractors with deficiencies noted through Quality Assurance monitoring or other performance factors. Typically, the process starts with Quality Assurance staff identifying specific needs and assessing the severity of the problem. An on-site trainer provided by WECC will then respond, usually within a month of the referral. Training is available in twenty-eight different topic areas, including administration, financial procedures, and weatherization technical requirements. Examples of PBT include advanced air sealing, and reconciliation of direct labor rates. These visits are sometimes combined with technical assistance funds to provide on-site support in a technical area. Visits for PBT are designed to provide training and support for specific crews or contractors whose work was cited by our Quality Assurance team. The support is hands-on technical training, delivered without a classroom, during the weatherization process. The trainer works directly with the installers to improve their skills while completing a job.

Additional training and technical assistance is available for subgrantees whenever our evaluations identify lower performance levels. Additional studies have been performed on high performing subgrantees to determine what helps them succeed so that information can be shared with others in the State.

#### Required Subgrantee Training Attendance

Subgrantee attendance is typically required at trainings or meetings where DES policy changes are reviewed. Specific trainings and applicable certifications are required for lead renovator, asbestos disciplines that allow for the safe weatherization of buildings, and proper work procedures when mold and moisture problems are noted.

Attendance for all training is tracked in a database maintained by WECC. The database is also used to track renewals for various certifications.

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#### Energy Auditor Certification

Since 2003, Wisconsin has been providing annual five-day Basic Energy Auditor trainings with a certification test at the end of the training. The Basic Energy Auditor certification became mandatory for all energy auditors on July 1, 2009. As noted above, we anticipate Wisconsin's Tier 1 Energy Auditor trainings will be IREC accredited beginning with PY15. Certification requires successfully completing the Basic Energy Auditor training and also the Beginning Weatherization Assistant for Auditors course. This includes training in both the National Energy Audit Tool (NEAT) and the Mobile Home Energy Audit (MHEA). Since 2007, 182 Energy Auditors have been trained and certified to work in Wisconsin's program. New energy auditors who are not yet certified must have their work reviewed by a certified auditor prior to issuing any work orders. Intermediate Energy Auditor training is also offered and we anticipate will be IREC accredited beginning with PY15.

Per the Home Energy Plus Weatherization Manual 1.2.6 Basic Energy Auditor Certification, all persons auditing homes with the Wisconsin Weatherization Assistance Program shall obtain a Wisconsin Weatherization Basic Energy Auditor Certification within 12 months of beginning to audit homes for the program.

Staff working toward a Basic Energy Auditor Certification will be considered an Energy Auditor Trainee and shall have their audits reviewed and signed-off on by a certified Energy Auditor. Completion of the Basic Energy Auditor Certification requirement advances the energy auditor beyond the trainee status.

Three requirements shall be completed to become a certified Basic Energy Auditor:

1. Meet the DOE Weatherization Assistance Program Core Competencies pre-requisite for Basic Energy Audit Competencies, which are:
  - Ability to read and write legibly;
  - Basic verbal and written communication skills;
  - Basic construction knowledge;
  - Basic math skills; and
  - Basic computer skills.
2. Complete and pass the Basic Energy Auditor Course.
3. Complete and pass a Basic Weatherization Assistant course.

Further details can be found in a document called Core Competencies for the Weatherization Assistance Program on the Home Energy Plus Website and in the NREL Energy Auditor Job Task Analysis.

#### Technical Assistance Activities

Broadly, technical assistance funds are used to enhance and maintain the quality of the services available to Wisconsin's Weatherization Assistance Program customers. Projects vary widely and examples include research on specific weatherization measures or an on-site consultation for a subgrantee on financial management issues. Generally, a project must in some way work to further the objectives or requirements of the program. Listed below are the in-progress or planned technical assistance projects for this funding period.

#### Major Home Energy Plus Technical Assistance Projects for PY2015:

- **Weatherization Customer Guidebook** – Maintenance of the Weatherization Customer Guidebook will continue. This web-based product allows subgrantees to create a customized guide to the weatherization measures completed for each single-family home weatherized. The Guidebook includes maintenance requirements for each measure, as well as general energy management tips. The Guidebook went live on October 1, 2008 and is required for single-family and manufactured homes. An evaluation of the Guidebook was completed to determine the efficacy of the existing process and options for improvement. The results indicated that many home owners found it useful. More homeowners remembered receiving it when it was hand delivered over being mailed.

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- **Financial Management** – Technical support for WAP subgrantees on financial management issues such as cost allocation, inventory management, direct labor rate monitoring and reconciliation, and follow-up on any issues identified in a subgrantee's fiscal audit. This is a continuation of the support model developed in 2007.
- **Document Design Services** – Document design and support for the Home Energy Plus Programs brochure, and Weatherization Field Guide. Wisconsin completed a major revision of the Weatherization Field Guide in PY 2013 and in PY 2014 to incorporate the relevant SWS requirements as required by WPN 15-4, Section 1.
- **Weatherization Measures Support** – Analysis and maintenance of measures and field protocols. Currently in progress is an annual review of measure savings-to-investment ratios, combustion safety protocols, and new water heater technologies.
- **Self-Evaluation Savings System (SES)** – Wisconsin has built a Self-Evaluation Savings (SES) system that reviews all pre-and post-weatherization energy consumption for natural gas units served by our regulated utilities. Data collection started with FY2007 and provides annual updates of the therm and kWh savings of weatherized homes.
- **Energy Audit Maintenance** – Energy audit maintenance, coordination, and enhancement including managing the set-up libraries, program upgrades, and customizing the audit, as feasible, for Wisconsin use. Wisconsin will continue to work with Oak Ridge National Laboratory (ORNL) to test the new MulTEA tool for small multifamily buildings. Wisconsin will also continue working with ORNL to integrate a web-based version of Weatherization Assistant when it is available.
- **Home Energy Plus Information Call Center** – Provides for the operation and management of a call center. This is a toll free number, and serves as an entry port for the general public to the Home Energy Plus programs.
- **Home Energy Professional Quality Control Inspector Planning** – As noted in Section V.5.3, Wisconsin is implementing a Grantee-Developed QCI policy to comply with WPN 15-4 Section 3.

#### V.9 Energy Crisis and Disaster Plan

##### Energy Crisis Plan

n/a

##### Wisconsin Disaster Response Plan

In accordance with DOE's Weatherization Program Notice 12-07, the declaration of a disaster by the President or Governor is sufficient cause for the State of Wisconsin WAP to implement a series of amended procedures in those affected areas to allow the WAP subgrantee agencies to address the needs of the WAP eligible or previously weatherized low-income families affected by disaster conditions. Wisconsin recognizes that WAP has a very limited role in any disaster response plan. The use of DOE WAP funds is limited to eligible weatherization activities and the purchase and delivery of weatherization materials.

##### Allowable Re-Weatherization Activities

For communities or counties in Wisconsin that the President or Governor has declared a disaster area, local WAP agencies will be permitted to use DOE resources (truck, equipment, staff labor, and materials) and funds to re-weatherize affected homes after FEMA funds and insurance payments have been applied to the repair of the structure. The re-weatherization work will be performed in accordance with field procedure guides already established by the Wisconsin WAP and will include the following allowable costs:

- Limited clean-up in those areas of the home where WAP services will be provided. These costs will likely be charged as incidental repairs.
- The performance of an energy audit to determine the services to be provided. The audit will take into consideration all existing WAP materials previously installed and still intact and useful.
- Mechanical systems (central heating, hot water, etc.) and appliances will be inspected, and repaired or replaced as needed based on damage and wear and according to our usual standards

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- The auditor may consider deferring the job if the damage to the home appears to impact the structure and the materials to be installed cannot be safeguarded.
- The file must contain documentation of the damage through reports and digital or printed pictures of the affected area.

Each unit will be reported with specific tracking codes in WisWAP. This notation will be part of the data entry so it can be easily identified and sorted for future reference. The costs for these re-weatherized units will be reported to DOE in the same manner as other re-weatherization cases.

**Work In Progress Cases**

In some cases, the local WAP agency may have work in-progress at homes where severe damage has occurred. These units and the associated costs have not been reported to DOE yet there may be significant loss of resources due to the damages. These homes will be identified in the WisWAP system so that proper reporting of costs can be easily tracked.